

ABSTRACT

A skid steer vehicle has a suspension that includes a control arm pivotally coupled to the vehicle chassis that is supported by a hydraulic cylinder connected to an accumulator to provide springing. A hydraulic circuit coupled to the cylinder and accumulator permit the operator to raise and lower the chassis, to lock the suspension while the vehicle is loaded, and to automatically charge or discharge the accumulator to match the cylinder pressure during loading and unloading. In this manner, when the suspension is unlocked after loading, the vehicle chassis neither rises nor falls.